

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application.

1-60. (Canceled)

61. (Previously Presented) A method for supporting Mobile Subscriber Integrated Service Digital Network (MSISDN) numbers in an inbound roaming mobile device, comprising:

registering the mobile device in a Foreign Public Mobile Network (FPMN) in which the mobile device is roaming, the mobile device having a single International Mobile Subscriber Identity in a Home Public Mobile Network (HPMN) (IMSI-H);

the FPMN accepting the registration of the mobile device;

the FPMN sending messages to a signal gateway SG;

upon the SG determining that the mobile device is a subscriber to a temporary local number service,

modifying a calling Global Title (GT) to the SG;

relaying a registration message to the FPMN with the modified GT; and

the FPMN mapping a local MSISDN for use of the roaming mobile device;

wherein communications of the roaming mobile device using the local MSISDN are routed by the SG using the single IMSI-H,

wherein the HPMN has a Home Location Register (HLR) including a single HLR profile corresponding to the IMSI-H,

wherein the local MSISDN and at least one other MSISDN for use by the roaming mobile device correspond to the single HLR profile,

wherein the FPMN belongs to a network operator different from that of the HPMN, and

wherein the HPMN and the FPMN have a roaming agreement.

62-63. (Canceled)

64. (Previously Presented) A method for supporting Mobile Subscriber Integrated Service Digital Network (MSISDN) numbers in a roaming mobile device, comprising:

registering the mobile device in a foreign public mobile network, wherein a signal related to the registering is directed through a signal gateway coupling a home network of the mobile device and the foreign public mobile network without using a Roaming Service Provider Node (RSPN) at the foreign public mobile network, the mobile device having a single International Mobile Subscriber Identity in the home network (IMSI-H);

transmitting a welcome message to the mobile device, wherein the message comprises an offer to receive incoming calls from within the foreign public mobile network at preferred rates while registered with the foreign public mobile network; and

the foreign public mobile network mapping a local MSISDN for use of the registered mobile device;

wherein communications of the registered mobile device using the local MSISDN are routed using the single IMSI-H; and

wherein the home network has a Home Location Register (HLR) including a single HLR profile corresponding to the IMSI-H,

wherein the local MSISDN and at least one other MSISDN for use by the registered mobile device correspond to the single HLR profile,

wherein the foreign public mobile network belongs to a network operator different from that of the home network, and

wherein the home network and the foreign public mobile network have a roaming agreement.

65. (Previously Presented) The method of claim 64, further comprising the foreign public mobile network assigning a temporary local number to the mobile device.

66. (Previously Presented) The method of claim 64, further comprising;
assigning a temporary local number to the mobile device; and
transmitting the temporary local number to the mobile device via a Short Message Service (SMS) message.

67. (Previously Presented) The method of claim 65, further comprising the signal gateway issuing an InsertSubscriberData to a Visited Location Register (VLR) location of the mobile device in the foreign public mobile network.

68. (Previously Presented) A method for voicemail optimized Late Call Forwarding (LCF) supporting Mobile Subscriber Integrated Service Digital Network (MSISDN) numbers in an outbound roaming mobile device, the method comprising:

- registering the outbound roaming mobile device in a Foreign Public Mobile Network (FPMN), wherein a signal related to the registering is directed through a signal gateway coupling a Home Public Mobile Network (HPMN) of the mobile device and the FPMN without using a Roaming Service Provider Node (RSPN) at the FPMN, the mobile device having a single International Mobile Subscriber Identity in the HPMN (IMSI-H); and
- for a communication directed to a MSISDN number allocated by HPMN (MSISDN-H) of the outbound roaming mobile device, directly routing the communication to voicemail or a LCF number at the HPMN using the IMSI-H;
- wherein the home network has a Home Location Register (HLR) including a single HLR profile corresponding to the IMSI-H,
- wherein the MSISDN-H and at least one other MSISDN for use by the outbound roaming mobile device correspond to the single HLR profile,
- wherein the FPMN belongs to a network operator different from that of the HPMN, and
- wherein the HPMN and the FPMN have a roaming agreement.

69. (Previously Presented) A method for supporting Mobile Subscriber Integrated Service Digital Network (MSISDN) numbers in a roaming mobile device, the

mobile device having a single International Mobile Subscriber Identity in a Home Public Mobile Network (HPMN) (IMSI-H), the method comprising:

rejecting a pre-determined number of registration requests by the roaming mobile device to register with a Visited Public Mobile Network (VPMN); and

registering the roaming mobile device with a Foreign Public Mobile Network (FPMN), upon a registration attempt by the roaming mobile device to register with the FPMN;

wherein a signal related to the registering is directed, using the IMSI-H, through a signal gateway coupling the Home Public Mobile Network (HPMN) of the mobile device and the FPMN without using a Roaming Service Provider Node (RSPN) at the FPMN,

wherein the VPMN is a non-FPMN and a non-HPMN,

wherein the HPMN has a Home Location Register (HLR) including a single HLR profile corresponding to the IMSI-H,

wherein a first MSISDN number for use in the HPMN by the roaming mobile device and a second MSISDN number for use in the FPMN by the roaming mobile device correspond to the single HLR profile,

wherein the FPMN belongs to a network operator different from that of the HPMN, and

wherein the HPMN and the FPMN have a roaming agreement.

70-72. (Canceled)

73. (Previously Presented) The method of claim 64, wherein the mobile device is inbound roaming.

74. (Previously Presented) The method of claim 73, wherein the inbound roaming is national inbound roaming.

75. (Previously Presented) The method of claim 64, wherein the mobile device is outbound roaming.

76. (Previously Presented) The method of claim 75, wherein the outbound roaming is national outbound roaming.

77. (Canceled)

78. (Previously Presented) The method of claim 64, wherein the signal gateway supports multiple home networks.

79. (Previously Presented) The method of claim 69, further comprising:
at the FPMN, assigning a voicemail number to the mobile device; and
providing access to the home network voicemail via the voicemail number.

80-83. (Canceled)

84. (Previously Presented) The method of claim 64, wherein the first public mobile network is a Home Public Mobile Network (HPMN) and the second public mobile network is a Foreign Public Mobile Network (FPMN).